

AMENDMENTS TO THE CLAIMS:

Replace the claims with the following rewritten listing:

1. (Currently Amended) Parametric equalizer comprising
filtering means (FM), user interface means (UIM), audio signal input means and
audio signal output means,
said filtering means comprising at least one filter block (FIB)
said user interface means (UIM) comprising means for adjustment of parameters:
corner frequency (fc), shape (Q) and gain (G),
said parametric equalizer comprising further means for establishing a variable
magnitude response adjusting a symmetry parameter independent to the other user
parameters, which may be continuously varied in order to provide a smooth transition
between low-shelf, bell-shaped and high-shelf filter characteristic of said at least one filter
block (FIB).
2. (Original) Parametric equalizer according to claim 1, wherein
said user interface means (UIM) comprises a further symmetry adjustment parameter
(SYM) for establishing a variable symmetry of the magnitude response of said at least one
filter block (FIB),
said user interface means is mapped by means of coefficient adjustment algorithms
into filter coefficient settings (FCS) of the at least one filter block (FIB), which when
established reflects the adjustment of the user interface means (UIM)
said further adjustment parameter (SYM) provides a filter coefficient setting (FCS)
comprising a combined adjustment of at least one zero frequency, pole frequency, zero Q
and pole Q of the magnitude response of said at least one filter block.
3. (Currently Amended) Parametric equalizer according to claim 1 ~~or 2~~, wherein said user
~~control interface~~ means facilitates adjustment of corner frequency (fc), Shape (Q), gain and
symmetry.

4. (Currently Amended) Parametric equalizer according to ~~any of claims 1-32~~, wherein said filter coefficient settings (FCS) comprise digital coefficients.
5. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-42~~, wherein said filter coefficient settings (FCS) comprise analogue values established by means of adjustable or selectable filter components of said at least one filtering means.
6. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-5~~, wherein said filtering means comprises less than twenty individually adjustable filter blocks (FIB); ~~preferably less than ten and most preferably less than six~~.
7. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-6~~, wherein at least one of said filtering blocks comprise a biquatic filter.
8. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-7~~, wherein said parametric equalizer comprises at least one, ~~preferably at least three~~ cascaded biquadratic filters blocks (FIB) .
9. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-8~~, wherein said filtering means is analogously implemented.
10. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-9~~, wherein said filtering means is digitally implemented.
11. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-102~~, wherein

said filtering means comprises gain compensation means adapted for compensation of alteration of the filtering block gain invoked by a changed setting of the further adjustment parameter.

12. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-11~~2, wherein

said filtering means comprises corner frequency compensation means adapted for compensation of alteration of the corner frequency of the filtering block invoked by a changed setting of the further adjustment parameter.

13. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-12~~, wherein

said user interface provides at least four different asymmetries of filter setting at least in part of the frequency range.

14. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-13~~2, wherein

said further adjustment parameter (SYM) enables the user to gradually transform the filter block (FIB) between a low-shelf and a high-shelf filter characteristic.

15. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-13~~2, wherein

said further adjustment parameter (SYM) enables the user to gradually transform the filter block (FIB) from a low-shelf into a bell-shape and further into a high-shelf, thus defining at least one more than said three standard filter types.

16. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-15~~, wherein ~~the a~~ number of said adjustment parameters corresponds to a ~~the~~ number of non-trivial degrees of freedom of the at least one filter block (FIB).

17. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-167~~, wherein ~~the~~a number of said adjustment parameters is at least ~~the~~a number of non-trivial degrees of freedom of the at least biquad filter block (FIB) times the number of filter blocks (FIB) of said filtering means.

18. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-178~~, wherein ~~the~~a number of non-trivial degrees of freedom of each of a number of said cascaded filter blocks is at least four.

19. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-182~~, wherein the symmetry parameter may be set by means of the user interface to at least four different values, ~~preferably a continuous interval of values in the digital or analog embodiment~~.

20. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-19~~, wherein the adjustment parameters are converted into filter coefficient settings (FCS) triggered by ~~the~~ setting of the adjustment parameters by the user.

21. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-20~~, wherein the conversion of adjustment parameters into filter coefficient settings is invertible.

22. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-21~~, wherein $NDOF_{par} \geq NDOF_{coef}$, where $NDOF_{par}$ is the number of adjustable equalizer parameters and $NDOF_{coef}$ is the number of non-trivial degrees of freedom (fc, G, Q, Sym).

23. (Currently Amended) Parametric equalizer according to ~~any of the claims 1-22~~, wherein given filter coefficient settings may be converted into corresponding adjustment parameters.

24. – 26. (Cancelled)